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30. (Added) The method of Claim 29, wherein said cultured microbial organisms have a higher average amount of omega-3 highly unsaturated fatty acid than an average for naturally-occurring organisms of a same genus.

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31. (Added) The method of Claim 29, wherein said milk product is selected from the group consisting of milk, cheese and butter.

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32. (Added) The method of Claim 29, wherein said animal is selected from the group consisting of cows, sheep and goats.

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33. (Added) The method of Claim 29, wherein said feed material comprises an element selected from the group consisting of Thraustochytriales, omega-3 highly unsaturated fatty acid extracted from Thraustochytriales, and mixtures thereof.

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34. (Added) The method of Claim 33, wherein said feed material comprises microorganisms of the genus *Thraustochytrium*, *Schizochytrium* or a mixture thereof in whole cell form.

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35. (Added) The method of Claim 33, wherein said Thraustochytriales have the identifying characteristics of ATCC number 20888, ATCC number 20889, ATCC number 20890, ATCC number 20891, ATCC number 20892, and mutant strains derived from any of the foregoing.

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36. (Added) The method of Claim 33 further comprising the step of obtaining said Thraustochytriales by a direct fermentation of grain, corn syrup or agricultural/fermentation byproducts by *Thraustochytrium*, *Schizochytrium* or a mixture thereof.

9/37. (Added) The method of Claim 32, wherein said feed material contains less than about 40% water.

10/38. (Added) The method of Claim 33, wherein said feed material is prepared by extrusion.

11/39. (Added) The method of Claim 29, wherein said feed material contains omega-6 highly unsaturated fatty acid in an amount effective to increase the content of omega-6 highly unsaturated fatty acid in said milk product.

12/40. (Added) The method of Claim 29, wherein said milk product is consumable by humans.

13/41. (Added) A method for producing a milk product comprising the steps of:

(a) feeding an animal a feed material comprising an element selected from the group consisting of Thraustochytriales, omega-3 highly unsaturated fatty acid extracted from Thraustochytriales, and mixtures thereof in an amount effective to increase the content of omega-3 highly unsaturated fatty acid in the milk product; and

(b) obtaining the milk product from said animal.

14/42. (Added) The method of Claim 41, wherein said feed material comprises microorganisms of the genus *Thraustochytrium*, *Schizochytrium* or a mixture thereof in whole cell form.

15/43. (Added) The method of Claim 41, wherein said Thraustochytriales have the identifying characteristics of ATCC number 20888, ATCC number 20889, ATCC number 20890, ATCC number

20891, ATCC number 20892, and mutant strains derived from any of the foregoing.

14/ 44. (Added) The method of Claim 13, wherein said *Thraustochytriales* is obtained by a direct fermentation of grain, corn syrup or agricultural/fermentation byproducts by *Thraustochytrium*, *Schizochytrium* or a mixture thereof.

17/ 45. (Added) The method of Claim 13 wherein said milk product is selected from the group consisting of milk, cheese and butter.

18/ 46. (Added) The method of Claim 13, wherein said animal is selected from the group consisting of cows, sheep and goats.

19/ 47. (Added) A method of producing a milk product comprising the steps of raising an animal by feeding the animal a feed material comprising an element selected from the group consisting of *Thraustochytrium*, *Schizochytrium*, omega-3 highly unsaturated fatty acid extracted from said *Schizochytrium* ^{or} ~~and/or~~ said *Thraustochytrium*, and mixtures thereof in an amount effective to increase the content of omega-3 highly unsaturated fatty acid in said milk product, wherein said milk product is selected from the group consisting of milk, cheese and butter, and wherein said animal is selected from the group consisting of cows, sheep and goats.

20/ 48. (Added) The method of Claim 19, wherein said *Thraustochytrium* has the identifying characteristics of ATCC number 20890, ATCC number 20891, ATCC number 20892 or mutant strains